Integrated Publishing

www.tpub.com

DRIVING UNDER HAZARDOUS CONDITIONS

Driving under hazardous conditions requires special skills and your undivided attention. The following paragraphs contain some guidelines intended to make you a good operator under adverse driving conditions.

SNOW AND ICE

Snow and ice severely limit the traction of a vehicle. When you are moving over fresh snow, maintain a slow, steady speed. Rapid acceleration is likely to cause skidding or cause the wheels to dig in. Should your vehicle become stuck in a hole in the snow, rocking it back and forth by shifting from forward to reverse may enable you to start again. Brakes, when used, should be applied lightly and released quickly if skidding begins.

Hard-packed snow or ice is more dangerous to drive on than fresh snow. To increase traction, put chains on all driving wheels. Snow tires are not much help on ice, as they add little or no traction and give you a false feeling of security. Deflating the tires a bit assists in preventing skidding.

Snow and ice affect visibility, stopping distance, maneuverability, and vehicle control. For driving under such conditions, you should take the following precautions:

1. Adjust the speed of the vehicle to existing conditions.

2. Under normal conditions, allow at least one car length between vehicles for each 10 miles per hour (mph) of speed you are traveling at. Increase the normal safe distance between vehicles to allow for hazardous conditions.

3. Use tire chains or snow tires on ice or snow; however, remember that they are only an aid to increase traction and do not eliminate the necessity for added caution.

4. Slow down when approaching bridges, overpasses, and shady areas in the road; surfaces in such areas often freeze before regular roadway surfaces do and remain frozen longer.

5. Keep the outside of the windshield and windows clear of snow, ice, and frost at all times, and use the vehicle defroster to improve visibility. Turn on headlight and use extreme caution when driving in fog.

6. Apply brakes with a light pumping action to prevent skidding and use engine compression to help control the vehicle.

7. Signal well in advance to warn others of an intended stop or turn.

WET ROADS

When driving through water, reduce speed to prevent the brake drums, engine, and ignition from getting wet. Apply foot pressure on the brake pedal just before entering and during passage through water deep enough to enter the brakes. Test the brakes for effectiveness immediately after leaving the water. If water has entered the brake drums and wet the linings, drive very slowly while gently applying sufficient pressure on the brake pedal to cause a slight drag, thereby squeezing the brake linings against the drums and forcing the water out of the linings.

Most roads are more slippery just after it begins to rain. This is because oil, that has dropped from vehicles traveling the road, forms a film on the road. Under these conditions, an operator should proceed at a slow speed because at least twice the normal stopping distance is needed to stop a vehicle.

When roads are wet, your tires may ride on a thin film of water, like skis. This condition is called hydroplaning and you can easily lose control and skid when your tires are not touching the road. Keep your tires on the road by slowing down when it rains and by having the correct air pressure and good tread on your tires.

NIGHT DRIVING

Some operators try to drive just as fast at night as they do in the daytime. Speed should always be reduced for nighttime driving.

NIGHT DRIVING IS TWO TO THREE TIMES MORE DANGEROUS THAN DAY DRIVING. Fatigue and sharply reduced vision are the primary causes for increased danger. The steady hum of the motor and the darkness on the road ahead tend to lull us to sleep at the wheel. Wide-awake driving is necessary at all times and especially at night, since we cannot see as well at night as we can in daylight. Driving safely after dark requires particular skills and extra care.

The following are requirements and practices applicable to night driving which should be carefully observed: . Lower the beams of your headlights when within 500 feet of an approaching vehicle.

Lower the beams of your headlights when within 200 feet of a vehicle in front of you.

Lower the beams of your headlights when you are driving on well-illuminated streets.

Use your low-beam headlights when driving in fog, and reduce your speed. Driving with your high beams in fog is like shining your high-beam headlights on a mirror-light is reflected back into your eyes and blinds you.

Use your high-beam headlights when it is safe and legal. Using low-beam highlight all the time cuts down on your ability to see ahead. Use your high-beams when you are NOT within 500 feet of an approaching vehicle.

Avoid looking directly into the lights of oncoming vehicles. Instead, watch the right-hand edge of the road.

Keep your headlights properly adjusted so the lower beams are not aimed upward into the approaching driver's eyes.

Keep your windshield clean.

Slow down when facing the glare from approaching headlights.

Be sure you can stop, when necessary, within the vision distance of the headlights of your vehicle, and watch constantly for pedestrians along the roadside.

Use your headlights from one-half hour before sunset to one-half hour after sunrise and at any time visibility is reduced.

FOG OR SMOKE

Driving in fog or smoke greatly reduces visibility. Use the techniques described earlier for driving on wet roads. Again, slow down, turn on your low-beam headlights, and be ready for a fast stop.

DRIVING UNDER SPECIAL CONDITIONS

You may have to operate a vehicle in unique conditions. The way you perform under these conditions are discussed in the following paragraphs.

SAND

The major problem sand presents is to gain traction without digging in. Sand can be stabilized with a large volume of water but loosens as soon as it dries out. Often, tires spin and dig into the sand rapidly which causes a jerking motion in the drive line.

NOTE: This jerking motion can cause severe damage to axles, differentials, and propeller shafts. All-wheel drive vehicles have less difficulty, but they consume considerable power.

Should you have to operate in sand, there are some actions you can take to help you out when a winch is not available. Partially deflate your tires; this gives your tires a wider footprint for traction. You can use mats of brush, wire, grass, lumber or anything that can "bridge over" and allow you to spread the load of your vehicle over a larger area.

CROSS-COUNTRY

Driving cross-country can produce many problems. Should you have to drive cross-country, it is best to have someone walk in front of your vehicle to look for holes, stumps, and ditches that may damage your vehicle. Proceed slowly and use the lowest gear possible. Avoid wet, marshy areas if possible because a marsh will crust over and break through if you drive over it. When it breaks through, there is little you can do but call for assistance to be towed.

Watch out for stumps, rocks, or anything on which you may get high center. Sometimes it is better to keep your tires on large rocks and go over them, rather than straddle them. Stumps may be cut off for your vehicle to clear.

DRIVING HOURS

Driving hours are regulated by the U.S. Department of Transportation, Code of Federal Regulations, Title

49. These regulations are reflected in the *Federal Motor Carrier Safety Regulations Pocketbook, ORS-7A.* You are restricted to drive no longer than 10 hours in a 15-hour period after 8 hours off duty. You, the operator, are responsible for the safe operation of your vehicle.

As a safety measure, an operator should take breaks or rest stops when becoming fatigued or sleepy. After parking the vehicle, get out and walk around to stretch your muscles. Rest stops are especially important on a long trip requiring many hours of driving.

WARNING

Extended periods of driving often results in driver fatigue. Physical and mental fatigue brought on by extended periods of time behind the wheel is a frequent problem encountered by operators. If operators are exhausted, they may doze at the wheel and lose control of the vehicle, resulting in a serious or fatal mishap.